Author Index of Volume 158

Angers, R., 7

Baral, S., 1
Baril, D., 7
Baril, J., 7
Bay, B., 139
Bello, J. M., 227
Bye, R. L., 103

Calderon, H. A., 207
Cermak, J., 79
Cesari, E., 119
Chang, C. P., 195
Chen, G. H., 93
Chen, S., 251
Cheng, Y. Q., 11
Chou, J. M., 241
Chow, G. M., 1
Cortie, M. B., 21
Crowe, C. R., 259

Das, S. K., 103
DiMelfi, R. J., 53
Dudko, P. P., 157
Dutkiewicz, J., 119

Escudero, M. L., 227

Frefer, A., 93
Froes, F. H., 93

Gan, D., 251

Hansen, N., 139
Ho, E. T. C., 185
Hon, M. H., 241
Hong, S. J., 195
Hu, Z., 47

Ilichev, V. Ya., 157

Jin, Z., 235
Joye, J. C., 111

Kao, P. W., 195
Kassam, Z. H. A., 185
Kim, N. J., 103
Kostorz, G., 207
Krczicz, I., 157
Krejci, J., 177
Kuhlmann-Wilsdorf, D., 139
Kunz, L., 177

Lambrigger, M., 207
Lavrentev, F. F., 157
Lee, J. L., 241
Lewandowski, J. J., 31
Lin, H. C., 87
Liu, J. H., 11
Lukas, P., 177

Mari, D., 203
Marti, U., 203
Maslii, G. I., 157
Million, B., 79
Mondal, D. K., 147
Morris, D. G., 111
Morris, M. A., 111
Mukherjee, A. K., 167

Needleman, A., 129
Ning, X., 47

Ochiai, S., 65
Osamura, K., 65

Peters, P. W. M., 65
Petza, P., 157
Pokhil, Yu. A., 157
Pokorna, A., 79
Pons, J., 119
Price, R., 1

Ratna, B. R., 1
Ray, R. K., 147
Rigney, J. D., 31
Robinson, F. P. A., 21
Ruzickova, J., 79

Schnur, J. M., 1
Schoen, P. E., 1
Schulte, K., 65
Sergienko, V. V., 157
Shen, P., 251
Shi, D. K., 11
Shi, S. Q., 71
Silva, P. C., 203
Smeltzer, W. W., 71
Sørensen, N., 129
Stefanescu, D. M., 215
Stockton, W. B., 1
Suryanarayana, C., 93

Telegon, A. I., 157
Thompson, D. A., 71
Ting, A. C., 1
Tvergaard, V., 129

Upadhya, G., 215

Valiev, R. Z., 167

Wai, S. W., 21
Wang, Z., 185
Wu, S. K., 87

Xia, C., 235

Yang, H. S., 167
Yu, H., 47

Zelin, M. G., 167
Zhang, S., 47
Zhang, T., 47
Zhu, Y., 47

Elsevier Sequoia

Subject Index of Volume 158

Alloys
  effect of γ precipitates on the martensitic transformation in Cu–Al–Mn alloys, 119
  effects of hot rolling on the martensitic transformation of an equiatomic TiNi alloy, 87
  fabrication and tensile properties of rapidly solidified Cu–10Ni alloy, 7
  fatigue behaviour of single crystals of a Cu–22%Zn alloy, 177
  fracture micromechanisms and plasticity of Fe–Cr–Ni–Ti alloys in the temperature range 77–4.2 K, 157
  high strength copper–zirconium alloys prepared by rapid solidification techniques, 111
  high temperature deformation of a magnesium alloy with controlled grain structures, 167
  Incoloy 901 alloy with improved malleability, 47
  influence of carbon on Fe grain boundary self-diffusion in austenitic alloys Fe–20Ni–10Cr–xC, 79
  microstructural development in Al–SiC composites made by resistance sintering of mechanically alloyed powders, 195
  modeling of the crystalline-to-amorphous transition in rapidly solidified alloys, 215
  structural evolution in mechanically alloyed Ti–Al alloys, 93
Aluminides
  effects of reinforcement size and distribution on fracture toughness of composite nickel aluminide intermetallics, 31
Aluminium
  effect of γ precipitates on the martensitic transformation in Cu–Al–Mn alloys, 119
  microstructural development in Al–SiC composites made by resistance sintering of mechanically alloyed powders, 195
  microstructural evolution in rolled aluminium, 139
  structural evolution in mechanically alloyed Ti–Al alloys, 93
  structure and properties of high Zr containing rapidly solidified Al–Ki–Cu–Mg–Zr alloys, 103
Austenite
  the austenite transformation in ferritic ductile cast iron, 241

Bainite
  cleavage fracture in high carbon bainite, 11

Carbon
  a new photolithographic technique to detect the local deformation of materials: application to WC–Co composites, 203
  cleavage fracture in high carbon bainite, 11
  development of {111} texture during cold rolling and recrystallization of a C–Mn–V dual-phase steel, 147
  influence of carbon on Fe grain boundary self-diffusion in austenitic alloys Fe–20Ni–10Cr–xC, 79
  microstructural development in Al–SiC composites made by resistance sintering of mechanically alloyed powders, 195
Cast iron
  the austenite transformation in ferritic ductile cast iron, 241
Chromium
  fracture micromechanisms and plasticity of Fe–Cr–Ni–Ti alloys in the temperature range 77–4.2 K, 157
  influence of carbon on Fe grain boundary self-diffusion in austenitic alloys Fe–20Ni–10Cr–xC, 79
Cleavage
  cleavage fracture in high carbon bainite, 11
Cobalt
  a new photolithographic technique to detect the local deformation of materials: application to WC–Co composites, 203
Cold rolling
  development of {111} texture during cold rolling and recrystallization of a C–Mn–V dual-phase steel, 147
  microstructural evolution in rolled aluminium, 139
Composites
  a new photolithographic technique to detect the local deformation of materials: application to WC–Co composites, 203
  effects of reinforcement size and distribution on fracture toughness of composite nickel aluminide intermetallics, 31
  fabrication of biologically-based microstructure composites for vacuum field emission, 1
  growth kinetics of sintered NiO/ZrO_2 (5 mol.% Y_2O_3) composites, 251
  microstructural development in Al–SiC composites made by resistance sintering of mechanically alloyed powders, 195
Controlled grain structures
  high temperature deformation of a magnesium alloy with controlled grain structures, 167
Copper
  effect of γ precipitates on the martensitic transformation in Cu–Al–Mn alloys, 119
  fabrication and tensile properties of rapidly solidified Cu–10Ni alloy, 7
  fatigue behaviour of single crystals of a Cu–22%Zn alloy, 177
  high strength copper–zirconium alloys prepared by rapid solidification techniques, 111
  structure and properties of high Zr containing rapidly solidified Al–Ki–Cu–Mg–Zr alloys, 103
Corrosion behaviour
  laser surface treatment and corrosion behaviour of martensitic stainless AISI 420 steel, 227
Cracking
  a study of high temperature cracking in ferritic stainless steels, 21
Creep
  three-dimensional analysis of creep in a metal matrix composite, 129
Crystals
  fatigue behaviour of single crystals of a Cu–22%Zn alloy, 177

Decomposition
  decomposition kinetics of Ni–11.8at.%Ti at 853 K, 207
Deformation
  a new photolithographic technique to detect the local deformation of materials: application to WC–Co composites, 203
  high temperature deformation of a magnesium alloy with controlled grain structures, 167
  on the transition to intergranular fracture during high temperature deformation, 53

Deuterium
deuterium permeation in polycrystalline nickel pre-implanted with nickel and helium ions, 71

Epoxy
estimation of the 90° ply strength distribution and shear lag parameter from multiple transverse cracking in graphite–epoxy cross-ply laminates, 65

Fatigue
fatigue behaviour of single crystals of a Cu–22%Zn alloy, 177
Ferrite
the austenite transformation in ferritic ductile cast iron, 241
Ferrites
a study of high temperature cracking in ferritic stainless steels, 21
Fracture
cleavage fracture in high carbon bainite, 11
fracture micromechanisms and plasticity of Fe–Cr–Ni–Ti alloys in the temperature range 77–4.2 K, 157
on the transition to intergranular fracture during high temperature deformation, 53
Fracture toughness
effects of reinforcement size and distribution on fracture toughness of composite nickel aluminide intermetallics, 31

Grain boundaries
influence of carbon on Fe grain boundary self-diffusion in austenitic alloys Fe–20Ni–10Cr–xC, 79
Graphite
estimation of the 90° ply strength distribution and shear lag parameter from multiple transverse cracking in graphite–epoxy cross-ply laminates, 65

Helium
deuterium permeation in polycrystalline nickel pre-implanted with nickel and helium ions, 71
Hot rolling
effects of hot rolling on the martensitic transformation of an equiatomic TiNi alloy, 87

Incoloy 901
Incoloy 901 alloy with improved malleability, 47
Interfaces
evolution of microstructure and diffusion paths in the molybdenum–steel explosion weld interface during heat treatment, 235
Intermetallics
effects of reinforcement size and distribution on fracture toughness of composite nickel aluminide intermetallics, 31
Iron
fracture micromechanisms and plasticity of Fe–Cr–Ni–Ti alloys in the temperature range 77–4.2 K, 157
influence of carbon on Fe grain boundary self-diffusion in austenitic alloys Fe–20Ni–10Cr–xC, 79

Laminates
estimation of the 90° ply strength distribution and shear lag parameter from multiple transverse cracking in graphite–epoxy cross-ply laminates, 65
Laser surface treatment
laser surface treatment and corrosion behaviour of martensitic stainless AISI 420 steel, 227
Lithium
structure and properties of high Zr containing rapidly solidified Al–Ki–Cu–Mg–Zr alloys, 103

Magnesium
high temperature deformation of a magnesium alloy with controlled grain structures, 167
structure and properties of high Zr containing rapidly solidified Al–Ki–Cu–Mg–Zr alloys, 103
Malleability
Incoloy 901 alloy with improved malleability, 47
Manganese
development of {111} texture during cold rolling and recrystallization of a C–Mn–V dual-phase steel, 147
effect of γ precipitates on the martensitic transformation in Cu–Al–Mn alloys, 119
Martensite
effect of γ precipitates on the martensitic transformation in Cu–Al–Mn alloys, 119
effects of hot rolling on the martensitic transformation of an equiatomic TiNi alloy, 87
laser surface treatment and corrosion behaviour of martensitic stainless AISI 420 steel, 227
Mechanical alloying
structural evolution in mechanically alloyed Ti–Al alloys, 93
Metal matrix composites
three-dimensional analysis of creep in a metal matrix composite, 129
Microstructural evolution
microstructural evolution in rolled aluminium, 139
Molybdenum
evolution of microstructure and diffusion paths in the molybdenum–steel explosion weld interface during heat treatment, 235
Multiple transverse cracking
estimation of the 90° ply strength distribution and shear lag parameter from multiple transverse cracking in graphite–epoxy cross-ply laminates, 65

Nickel
decomposition kinetics of Ni–11.8at.%Ti at 853 K, 207
deuterium permeation in polycrystalline nickel pre-implanted with nickel and helium ions, 71
effects of hot rolling on the martensitic transformation of an equiatomic TiNi alloy, 87
effects of reinforcement size and distribution on fracture toughness of composite nickel aluminide intermetallics, 31
fabrication and tensile properties of rapidly solidified Cu–10Ni alloy, 7
growth kinetics of sintered NiO/ZrO_2 (5 mol.% Y_2O_3) composites, 251
influence of carbon on Fe grain boundary self-diffusion in austenitic alloys Fe–20Ni–10Cr–xC, 79
Niobium
constitutive equations for a modified Zr–2.5wt.%Nb pressure tube material, 185

Oxygen
growth kinetics of sintered NiO/ZrO_2 (5 mol.% Y_2O_3) composites, 251

Permeation
deuterium permeation in polycrystalline nickel pre-implanted with nickel and helium ions, 71
Plasticity
fracture micromechanisms and plasticity of Fe–Cr–Ni–Ti alloys in the temperature range 77–4.2 K, 157
Polycrystals
deuterium permeation in polycrystalline nickel pre-implanted with nickel and helium ions, 71

Powders
microstructural development in Al–SiC composites made by resistance sintering of mechanically alloyed powders, 195
γ Precipitates
effect of γ precipitates on the martensitic transformation in Cu–Al–Mn alloys, 119
Pressure tubes
constitutive equations for a modified Zr–2.5wt.%Nb pressure tube material, 185

Rapid solidification
fabrication and tensile properties of rapidly solidified Cu–10Ni alloy, 7
high strength copper–zirconium alloys prepared by rapid solidification techniques, 111
modeling of the crystalline-to-amorphous transition in rapidly solidified alloys, 215
structure and properties of high Zr containing rapidly solidified Al–Ki–Cu–Mg–Zr alloys, 103
Recrystallization
development of {111} texture during cold rolling and recrystallization of a C–Mn–V dual-phase steel, 147

Shear lag parameters
estimation of the 90° ply strength distribution and shear lag parameter from multiple transverse cracking in graphite–epoxy cross-ply laminates, 65
Silicon
microstructural development in Al–SiC composites made by resistance sintering of mechanically alloyed powders, 195
Sintering
growth kinetics of sintered NiO/ZrO_2 (5 mol.% Y_2O_3) composites, 251
Stainless steel
laser surface treatment and corrosion behaviour of martensitic stainless AISI 420 steel, 227
Stainless steels
a study of high temperature cracking in ferritic stainless steels, 21
Steel
development of {111} texture during cold rolling and recrystallization of a C–Mn–V dual-phase steel, 147
evolution of microstructure and diffusion paths in the molybdenum–steel explosion weld interface during heat treatment, 235
Strength distribution
estimation of the 90° ply strength distribution and shear lag parameter from multiple transverse cracking in graphite–epoxy cross-ply laminates, 65

Tensile properties
fabrication and tensile properties of rapidly solidified Cu–10Ni alloy, 7
Titanium
decomposition kinetics of Ni–11.8at.%Ti at 853 K, 207
effects of hot rolling on the martensitic transformation of an equiatomic TiNi alloy, 87
fracture micromechanisms and plasticity of Fe–Cr–Ni–Ti alloys in the temperature range 77–4.2 K, 157
structural evolution in mechanically alloyed Ti–Al alloys, 93
Tungsten
a new photolithographic technique to detect the local deformation of materials: application to WC–Co composites, 203

Vacuum field emission
fabrication of biologically-based microstructure composites for vacuum field emission, 1
Vanadium
development of {111} texture during cold rolling and recrystallization of a C–Mn–V dual-phase steel, 147

Yttrium
growth kinetics of sintered NiO/ZrO_2 (5 mol.% Y_2O_3) composites, 251

Zinc
fatigue behaviour of single crystals of a Cu–22%Zn alloy, 177
Zirconium
constitutive equations for a modified Zr–2.5wt.%Nb pressure tube material, 185
growth kinetics of sintered NiO/ZrO_2 (5 mol.% Y_2O_3) composites, 251
high strength copper–zirconium alloys prepared by rapid solidification techniques, 111
structure and properties of high Zr containing rapidly solidified Al–Ki–Cu–Mg–Zr alloys, 103